

BLOOD PRESSURE PREDICTION MODEL FOR HYPERTENSIVE PATIENTS AT SARABURI HOSPITAL IN 2009

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OBJECTIVES: 1. To compare means of calories burnt by exercise (exercise), compliance, eating behavior, hypertension knowledge, age and blood pressure (BP) between gender and 2. To find correlations between exercise, compliance, eating behavior score, hypertension knowledge, age and blood pressure. 3. To employ Hierarchical Stepwise Multiple Regression Analysis (MRA) to predict blood pressure. **METHODS:** A retrospective research by face to face interview and clinical outcomes were used to investigate relationships between 6 variables and BP of random 200 hypertensive patients at Saraburi Hospital 2009. **RESULTS:** Total (N) 200 (100%) patients were mostly female 118 (59.00%) and 82 (41.00%) were male. The average age was 52.21 ± 12.01 years, average exercise per week 2787.24 ± 141.61 kcal, average compliance score 7.41 ± 1.93 , average SBP and DBP were 150.24 ± 18.49 and 89.40 ± 9.15 Hgmm. Cronbach's Alpha coefficient of Sorofman's Compliance scale for constructs "right time" and "right amount" were 0.7978, and 0.7896 respectively, Auanmoy Eating Behavior Scale was 0.7915. ANOVA confirmed that BP, compliance, hypertension knowledge, age, exercise and eating behavior score between male and female were not significantly different ($p > 0.05$). Pearson's correlation confirmed that age, exercise and compliance had significant negative correlation with DBP ($r = -0.19, -0.43, -0.60$ with $p = 0.00, 0.00, 0.00$ respectively). Age had significant positive correlation with SBP however exercise and medical regimens compliance had significant negative correlation with SBP ($r = 0.16, -0.81, -0.98$ with $p = 0.02, 0.00, 0.00$ respectively). MRA equation demonstrated the three most significant variables those predicted SBP and DBP were: compliance (Beta = $-0.90, -0.70$), eating behavior (Beta = $0.82, 0.72$) and exercise (Beta = $-0.11, -0.29$) $P = 0.00, 0.00, 0.00$ $R^2 = 0.58, 0.55$ respectively. **CONCLUSIONS:** The more patients complied to medical regimens, with good eating behavior and the more exercise the less patients' blood pressure was.

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THE MISSING PIECE BETWEEN TREATMENT EXPERIENCE AND INTENTION TO PERSIST: TESTING THE INTERNAL CONSISTENCY RELIABILITY AND PREDICTIVE VALIDITY OF ACCEPTABILITYChretien S¹, Viala-Danten M², Van Ganse E³, Patrick D⁴, Arnould B², Longin J¹¹Registral-Mapi, Lyon, France; ²Mapi Values, Lyon, France; ³Hôpital Neurologique PierreWertheimer, BRON Cedex, France; ⁴University of Washington, Seattle, WA, USA

OBJECTIVES: The ACCEPT© questionnaire is a self-administered generic acceptability instrument assessing how patients balance the advantages and disadvantages of long-term chronic therapy. It is made of 2 parts: 1/ several characteristics of patient experience with treatment giving an indication on which treatment attributes are leading to intentions and adherence; 2/ a scale measuring acceptability of the treatment. Our objective was to test the internal consistency reliability and predictive validity of the acceptability scale. **METHODS:** A survey was conducted in 60 community pharmacies. Patients treated with statin for more than 3 months were asked to complete a preliminary version of the acceptability scale (3 items), as well as questions regarding their compliance with their statin medication. Compliant patients were defined as those who reported never to forget to take their statin medication. Internal consistency of the acceptability scale was assessed by Cronbach's alpha. The statistical independence between the 3 acceptability items and compliance was investigated by chi-2 tests. The ability of the 3 acceptability items to detect non compliant patients was evaluated by the area under the Receiver Operating Characteristic (ROC) curve. **RESULTS:** Out of 443 patients included in the analysis, 28% have been treated for 1 to 3 years, and 54% for more than 3 years. 60% had no cardiovascular antecedent, 14% had an angina, 13% a prior myocardial infarction, 6% a prior stroke. 66% declared they never forgot to take their statin medication. Cronbach's alpha of the acceptability scale was 0.70. The 3 items were statistically related to compliance ($p\text{-chi}2 < 0.0001$). The area under the ROC curve was 0.69. **CONCLUSIONS:** The acceptability scale showed satisfying preliminary results of reliability and predictive validity. Further work is needed to validate the scale in other long-term treated populations and to evaluate its ability to predict persistence to treatment over time.

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VALUATION OF HEALTH STATE UTILITIES RELATED TO CARDIOVASCULAR PREVENTION WITH ASPIRINManson SC¹, van Hanswijk de Jonge P¹, Palsgrove A², Gorelick PB³¹United BioSource Corporation, London, UK; ²United BioSource Corporation, Bethesda,MD, USA; ³University of Illinois College of Medicine, Chicago, IL, USA

OBJECTIVES: The primary aim of the study was to determine societal utility scores for health states associated with events either benefiting from aspirin (myocardial infarction, stroke, angina) or potentially caused by aspirin (GI bleeding). The secondary aim was to determine the societal disutility score of taking aspirin every day. **METHODS:** Draft health states were developed based on a brief literature review and exploratory and validation interviews with cardiovascular ($n = 3$) and stroke ($n = 2$) specialists. The final health states were tested in a pilot study with members of the general public ($n = 6$). In the main study, members of the general public ($n = 90$ Canadians; $n = 86$ Americans) completed a chained standard gamble (SG) interview, a Visual Analogue Scale (VAS) rating task (0–100), the EQ-5D and a socio-demographic form. **RESULTS:** The samples were a reasonable match to the population of Canada and the US in terms of demographics (48% female, 67% white) and quality of life (rated by EQ-5D). Eight percent of participants had experienced one or more

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forms of CVD or stroke as described in the health states and 18% of participants were taking daily preventive aspirin. In patients who were not taking aspirin, adding daily aspirin to prevent CVD caused a decrement in utility of 0.018. Conversely, patients who were taking daily aspirin reported an increase in utility of 0.021 compared to if they were not taking aspirin. GI bleeding and transient ischemic attack were rated as the states with the highest utility (0.79) followed by angina (0.71 stable, 0.66 unstable). Various stages of MI and stroke were considered least desirable (0.10–0.63). **CONCLUSIONS:** The study highlights the benefit in utility that could be gained from preventing cardiovascular and stroke events. It also demonstrates that the minor burden of taking aspirin daily changes to a small incremental benefit in wellbeing in participants already taking aspirin.

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METHODS FOR ESTIMATING HEALTH-STATE UTILITIES IN PULMONARY ARTERIAL HYPERTENSIONMychaskiw MA¹, Berger A², Mardekian J¹, Hwang LJ¹, Oster G²¹Pfizer Inc, New York, NY, USA; ²Policy Analysis Inc, Brookline, MA, USA

OBJECTIVES: To compare health-state utility values obtained using three different instruments administered to patients with pulmonary arterial hypertension (PAH) enrolled in a randomized controlled trial of sildenafil. **METHODS:** Data for this study were obtained from a large phase III clinical trial in which patients were randomized to receive either sildenafil or placebo for 12 weeks. At each visit (baseline, weeks 1, 4, 8, and 12 of follow-up), patients were administered the Short Form-36 General Health Survey (SF-36) and the EuroQol Health Survey (EQ-5D); additionally they also were asked to provide a direct assessment of their current health state using a visual analog scale (VAS). Responses to the SF-36 and EQ-5D were then converted to health-state utility values using published algorithms. Patients were pooled across treatment groups, and attention was focused on baseline values. Statistical significance of differences between these three estimates was ascertained using paired t tests. **RESULTS:** There were a total of 274 patients across both treatment groups in the intent-to-treat population. Proportions of 0–30, 31–60, and 61–100 health-state utility values were 0.4%, 22.6%, and 77.0% for SF-36; 16.2%, 9.6%, and 74.3% for EQ-5D; and 8.6%, 47.2%, and 44.2% for VAS, respectively. Mean (95% confidence intervals) health-state utility values were 71.4 (69.6–73.1) for SF-36 ($P < 0.01$ vs. EQ-5D or VAS), 63.2 (60.2–66.3) for EQ-5D ($P < 0.01$ vs. VAS), and 59.0 (56.9–61.2) for VAS, respectively. **CONCLUSIONS:** Ratings of current health by PAH patients are significantly worse with a single-item VAS scale than based on responses to the EQ-5D and SF-36 health questionnaires. The EQ-5D appears to yield somewhat lower values than the SF-36. Further research is needed to better understand the reason(s) for these differences.

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SEVENTY-SEVEN HEALTH STATE UTILITIES ESTIMATED IN POLISH CARDIAC PATIENTS

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OBJECTIVES: The aim of this study was to create a catalogue of SF-6D health state utility values in the cardiovascular diseases, based on studies conducted in Polish population using the SF-36 questionnaire. **METHODS:** Five databases: MEDLINE, EMBASE, Cochrane Database, SCOPUS, Polish Medical Bibliography (Polska Bibliografia Lekarska; accessed on April 23, 2010) were systematically searched for SF-36 quality of life studies conducted in Polish cardiac patients. Only studies using original key answer and with published complete data for eight SF-36 dimensions were included. SF-6D utility scores were estimated based on SF-36 population data using the method published by Ara and Brazier in 2009. **RESULTS:** We initially identified 31 studies using SF-36 in Polish cardiac patients. In 14 studies proper SF-36 scoring algorithm was used and data for all eight domains were available. Data for 77 different health states related to five cardiac disorders were extracted: acute coronary syndrome, coronary artery disease, hypertension, atrial fibrillation and aortic valve disease. Each health state was described as value of 8 dimensions of quality of life and was converted to single-figure utility. Utility of acquired 77 health states ranged from 0.41 to 0.78. **CONCLUSIONS:** A catalogue of 77 health state utilities derived in Polish cardiac patients was estimated. It can be useful in pharmacoeconomic analyses conducted for cardiologic health technologies and should support reimbursement decision making in Poland.

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HOW PATIENTS' EXPERIENCE COULD INFLUENCE THEIR PREFERENCES TOWARD TREATMENT FOR ABDOMINAL AORTIC ANEURYSM: RESULTS FROM THE PREFER STUDYScalone L¹, Borghetti F², Faggioli G³, Stella A³, Cortesi PA¹, Mantovani LG⁴¹University of Milano—Bicocca, Monza, Italy; ²University of Milan, Milano, Italy; ³Sant'OrsolaMalpighi Hospital, University of Bologna, Bologna, Italy; ⁴CIRFF, Federico II University, Naples,

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OBJECTIVES: Factors influencing preferences towards treatment of abdominal aortic aneurysm (AAA) were scarcely investigated. To identify how patients' experience can affect their preferences for treatment of AAA. **METHODS:** within a multicentre Discrete-Choice-Study aimed to assess preferences toward AAA treatment the participant patients responded to 4 pair-wise choice sets comparing treatment options obtained from a factorial combination of 6 characteristics: type of anaesthesia (general vs. local); recovery time to everyday basic activities (2 vs. 4 days); risk of